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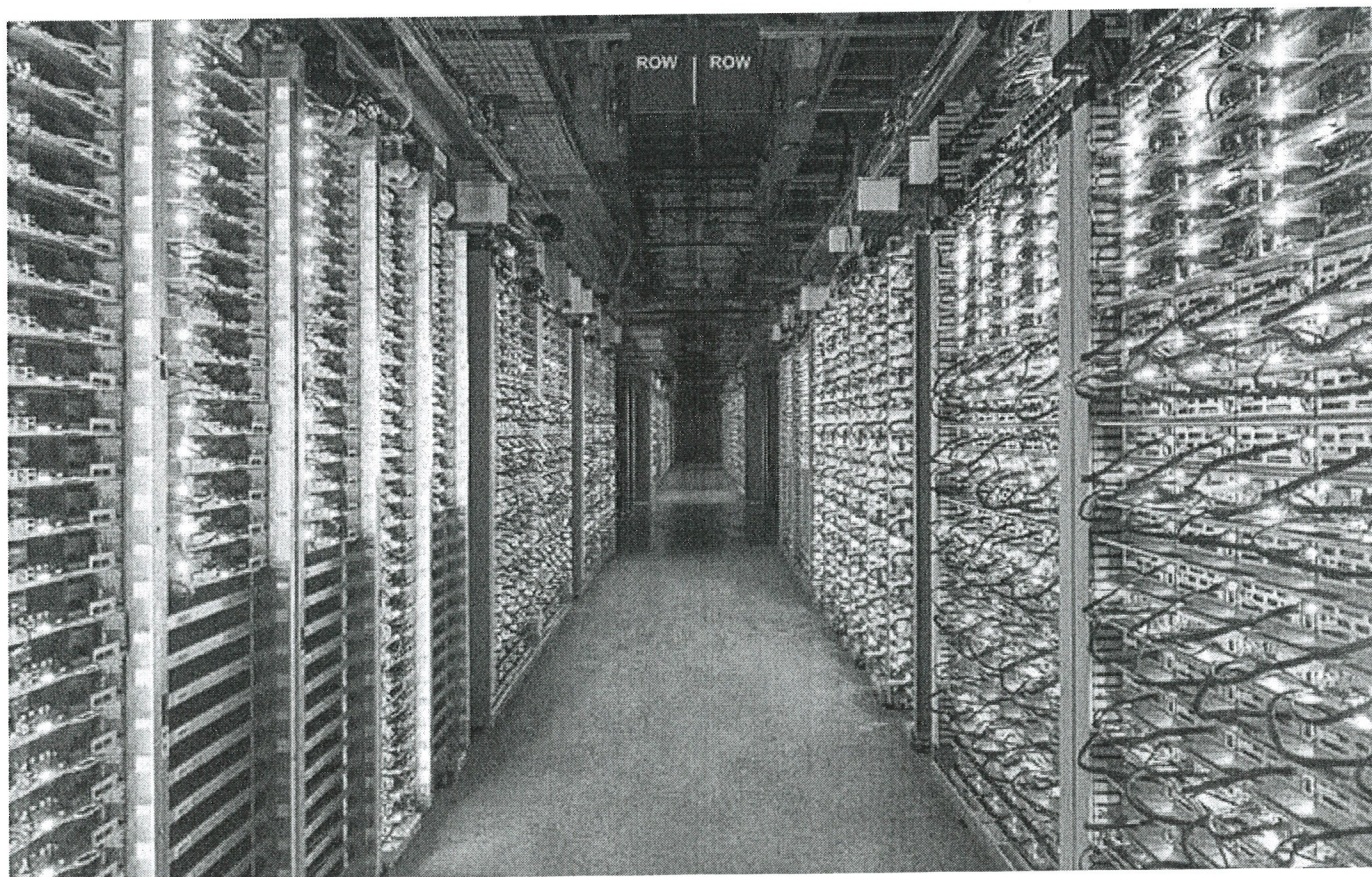
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Google Building More Data Centers for Massive Future Clouds

BY RICH MILLER - DECEMBER 3, 2019 — 1 COMMENT



The blinking lights of racks of Google servers glow in a darkened data hall in St. Ghislain, Belgium. (Image: Google)



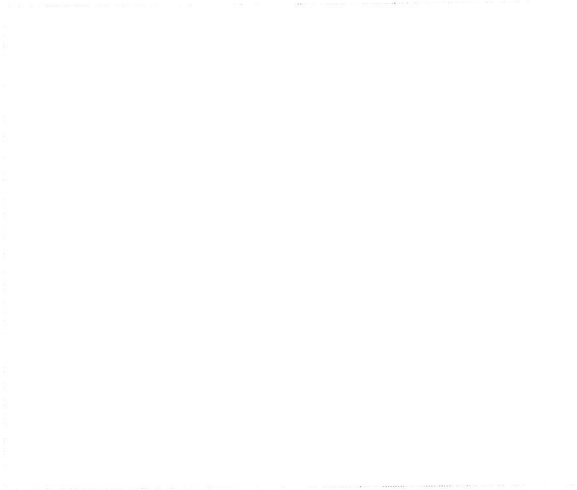
Google is building more data centers in more places than ever before. Although the torrid pace of hyperscale data center leasing has moderated this year, Google appears likely to make good on its pledge to invest \$13 billion in new data center campuses in 2019.

Google has opened new data centers in Northern Virginia and Tennessee in 2019, and broken ground for future campuses in Texas, Ohio and Nevada. The company has announced plans for a site in Nebraska, but has yet to confirm a location (although it is the prime suspect in a huge "codename" project near Lincoln). Google has also negotiated an incentive package to join the crowd of data center developers planning to build in Mesa, Arizona.

The building boom extends overseas as well. In September, Google said it will invest 3 billion Euros (\$3.3 billion US) over the next two years to expand its data center footprint in Europe, along with 10 new projects to generate renewable energy for its servers.

Google's 2019 investment is notable for both the geographic breadth of its new deployments and the drive for greater scale seen in the expansion of existing cloud campuses. The search leader is expanding upon existing cloud computing nodes in Oklahoma, South Carolina and Finland.

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The scale of Google's infrastructure is remarkable. The company now has 19 data center campuses around the globe, with 11 in the United States, 5 in Europe, two in Asia/Pacific and one in South America. These cloud campuses house multiple buildings, each approximately twice the size of a Wal-Mart and filled with servers and storage to manage data. Google typically spends more than \$1 billion to complete an entire campus, with some sites exceeding \$2 billion in investment.

Google executives say the company is building for a future powered by digital infrastructure.

"The impact of cloud computing is massive," said Daniel Golding, the Global Network Planning and Design Lead for Google. "We're seeing massive, massive growth in our cloud lines of business. We're also seeing a lot of growth in what used to be called SaaS. I really think the sky is the limit."

The Capacity Challenge: Preparing for A Bigger Cloud

On one level, Google has always been an outlier. Google is on the bleeding edge of data center technology, customizing nearly every element of its operations, from processors to building design. Google has recently shifted to liquid cooling with its latest hardware for artificial